

FAS – Office of Global Analysis (OGA)
United States Department of Agriculture (USDA)
International Operational Agriculture Monitoring Program



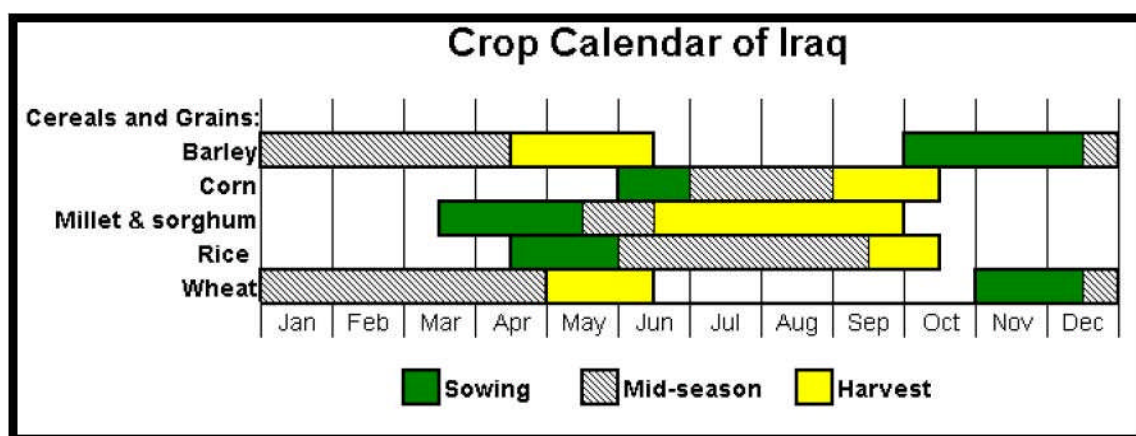
December Report – Week 4

December 30th, 2008

1. Mid-December typically marks the end of the winter grains sowing period. Northern Iraq, as a whole, experienced normal to above normal precipitation during this period (Figure 1). The provinces of As Sulaymaniyah, Arbil, Dahuk and At Ta'min received adequate rainfall throughout the sowing period (Figure 2). These provinces roughly contribute to 17% of total wheat and 30% of total barley production. At Ta'min experienced a brief dry period in between rain events (Figure 3), but the combination of above average rainfall and the utilization of irrigation in At Ta'min province should be sufficient to establish the winter grains crop. Similarly, the province of Ninawa received near to below normal rainfall, but the dry spell in between rain events was prolonged and soil moisture reserves were rapidly depleted (Figure 4). Ninawa province will be carefully observed for start-of-season production impacts using remote sensing analysis. In general, precipitation is better than the previous season.

2. Rainfall during the month of December has been relatively sparse, except for the last weeks of December which were marked by precipitation events that contributed from 10mm to 25mm of rainfall in the Northern provinces (Figure 5). Average temperatures have remained near or slightly below normal for the month of December which is an improvement compared to previous seasons (Figure 6). Heavier rainfall between 10mm and 100mm is forecasted in the Northern provinces over the next 7 days (Figure 7).

3. AWiFS IRS-P6 NDVI for the month of December showed the characteristic “greening” in the irrigated Southern provinces. The predominantly rainfed Northern provinces will not be showing the first significant signs of “green-up” until February 2009 (Figure 8). MODIS NDVI comparison between MY 2009/10 and MY 2008/09 does show an improvement in vegetative growth. Although the “green-up” corresponds with natural vegetation in the highlands, this may be a good sign for the upcoming rainfed crop (Figure 9).



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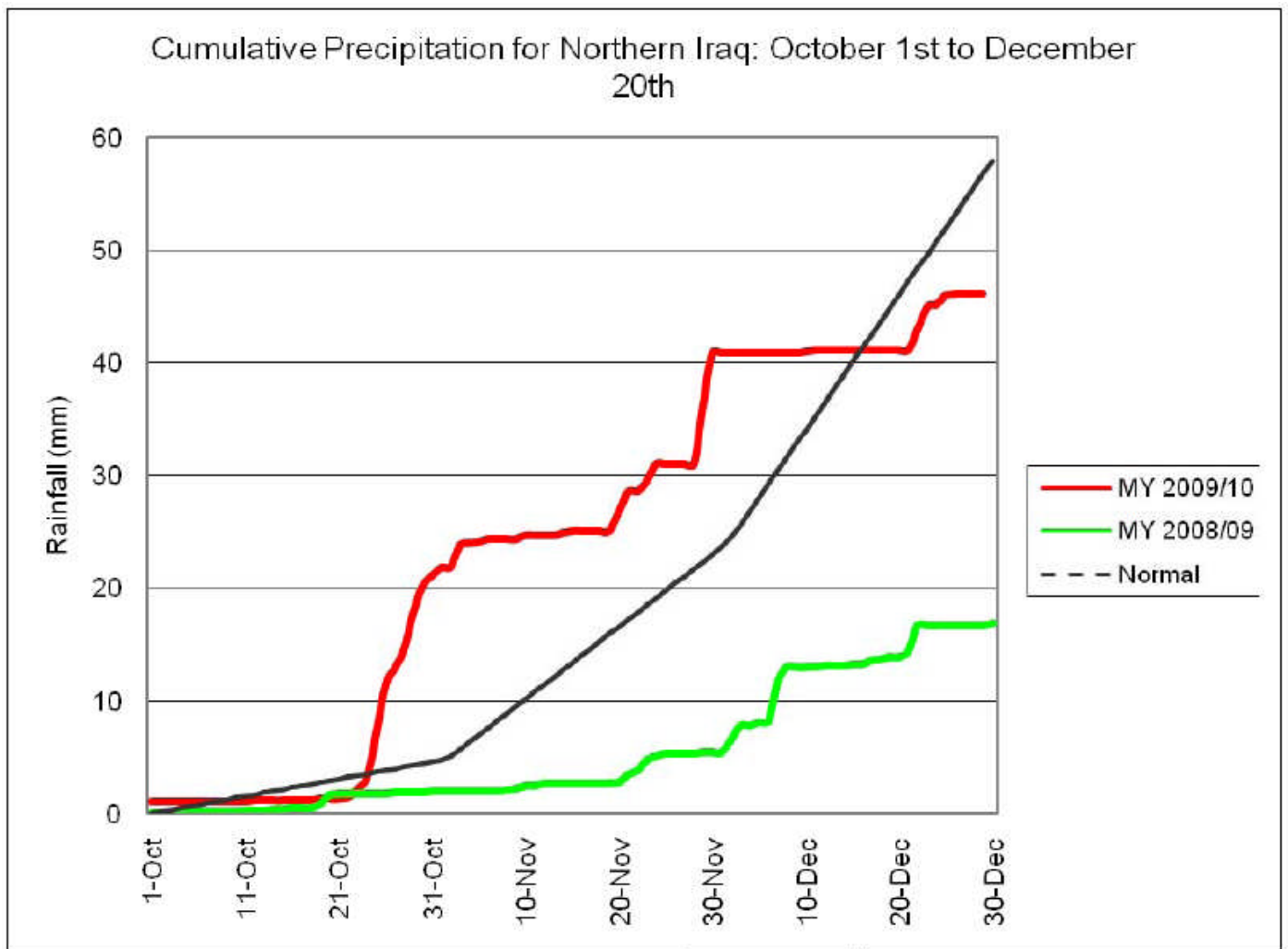


Figure 1: Cumulative precipitation for Northern Iraq: October 1st to December 20th.

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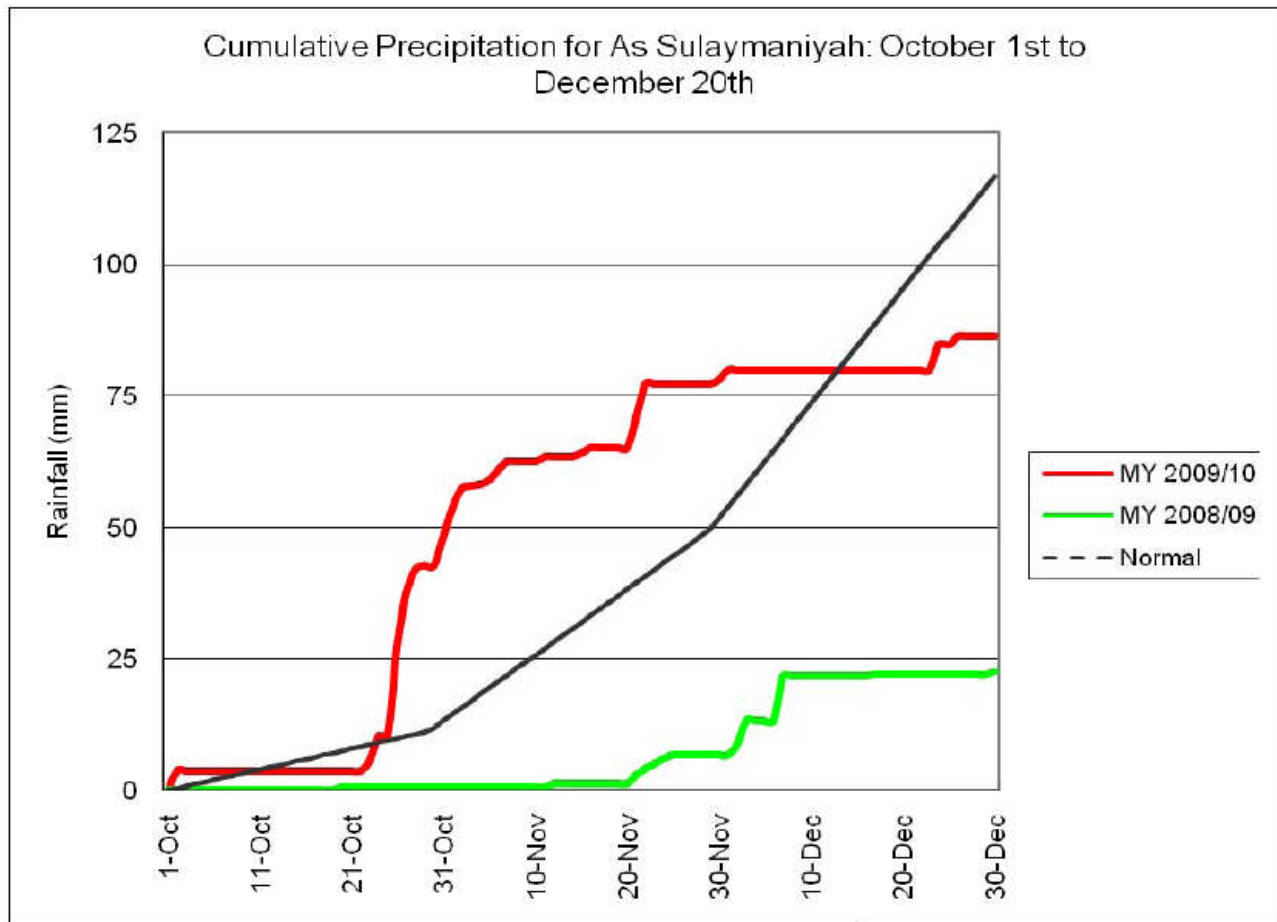


Figure 2: Cumulative precipitation for As Sulaymaniyah: October 1st to December 20th.

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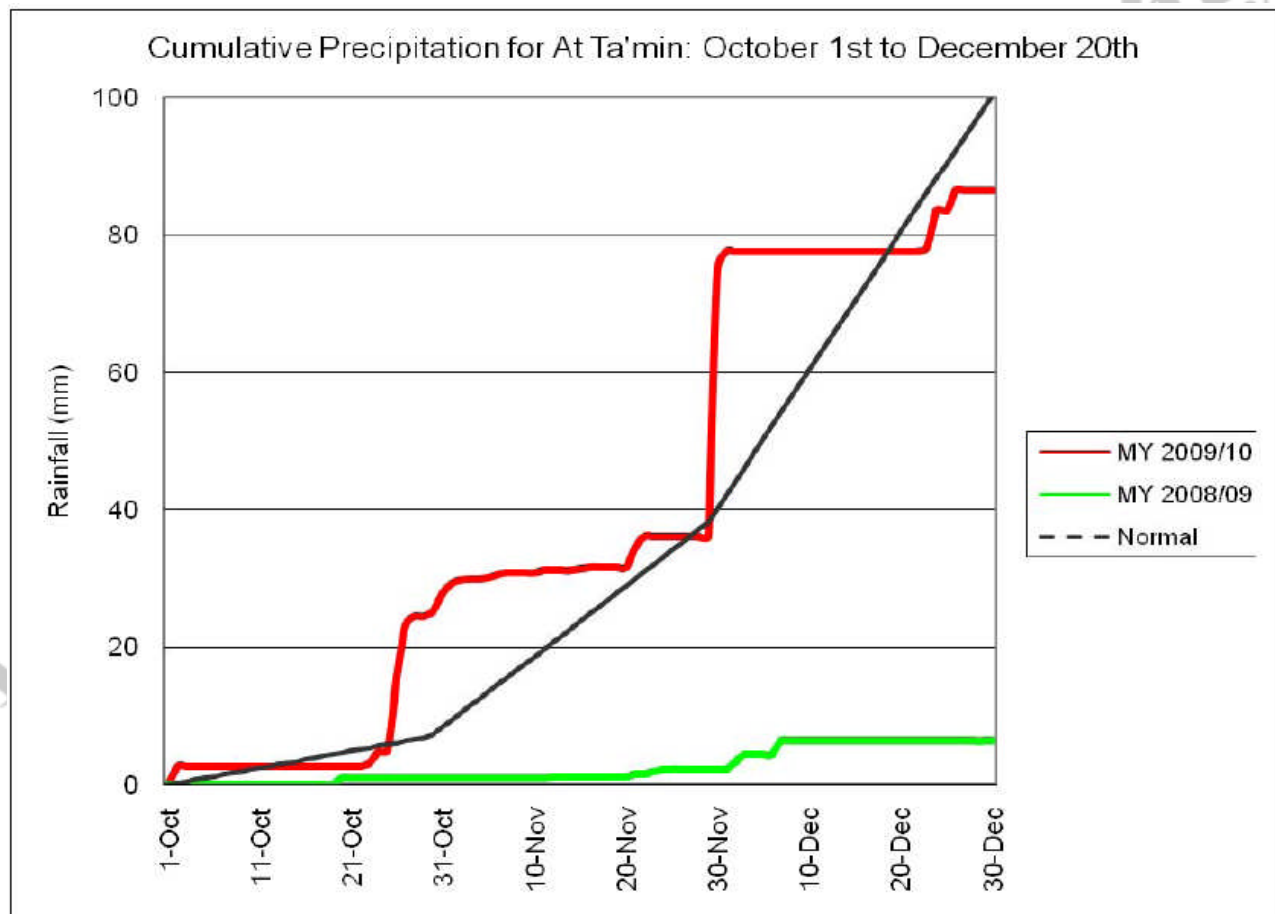


Figure 3: Cumulative precipitation for At Ta'min: October 1st to December 20th.

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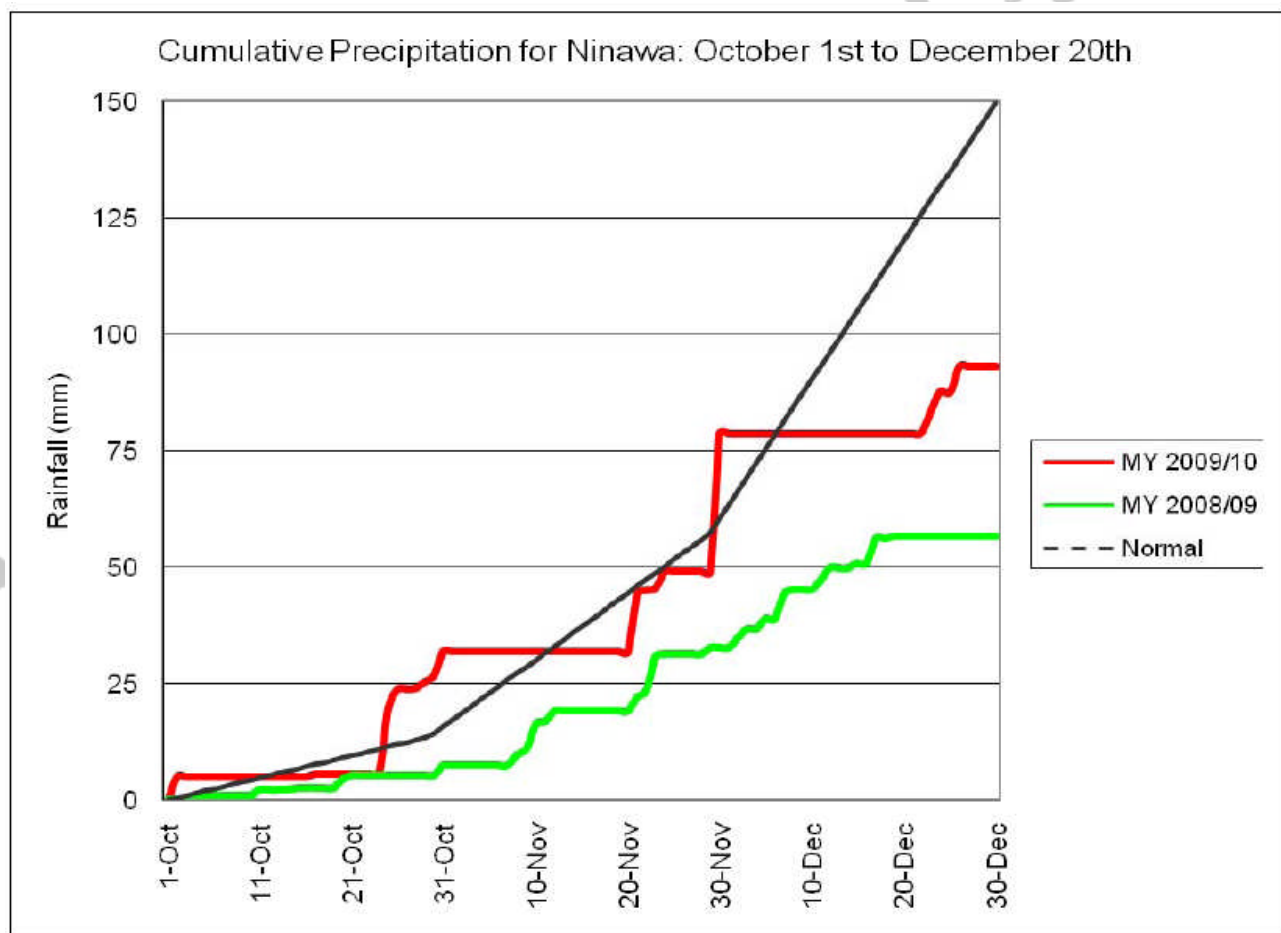


Figure 4: Cumulative precipitation for Ninawa: October 1st to December 20th.

Weekly Accumulated Rainfall: CMORPH Precipitation

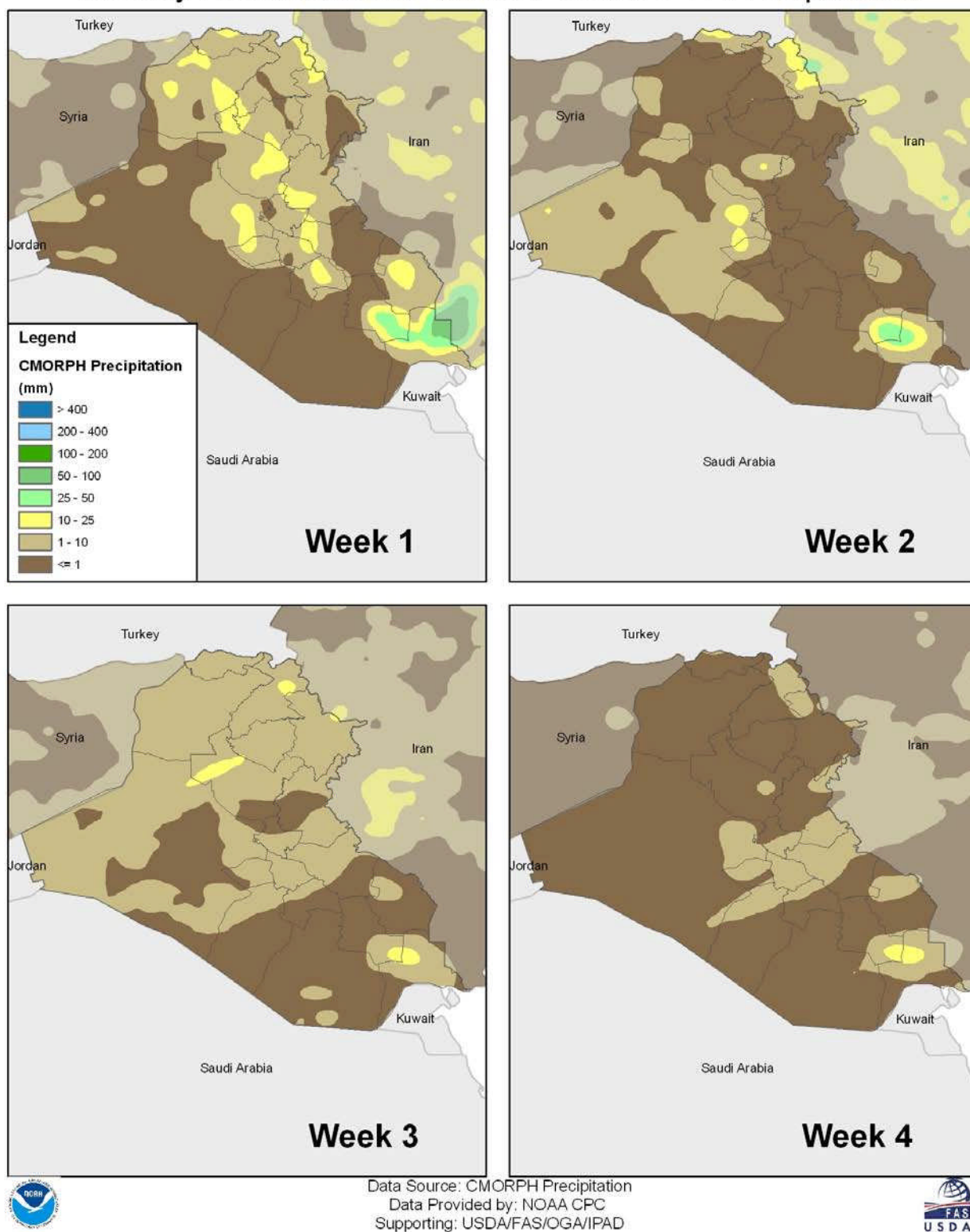


Figure 5: Weekly cumulative precipitation for the month of December 2008.

Average Temperature Departure: MY 2006/07 to MY 2009/10

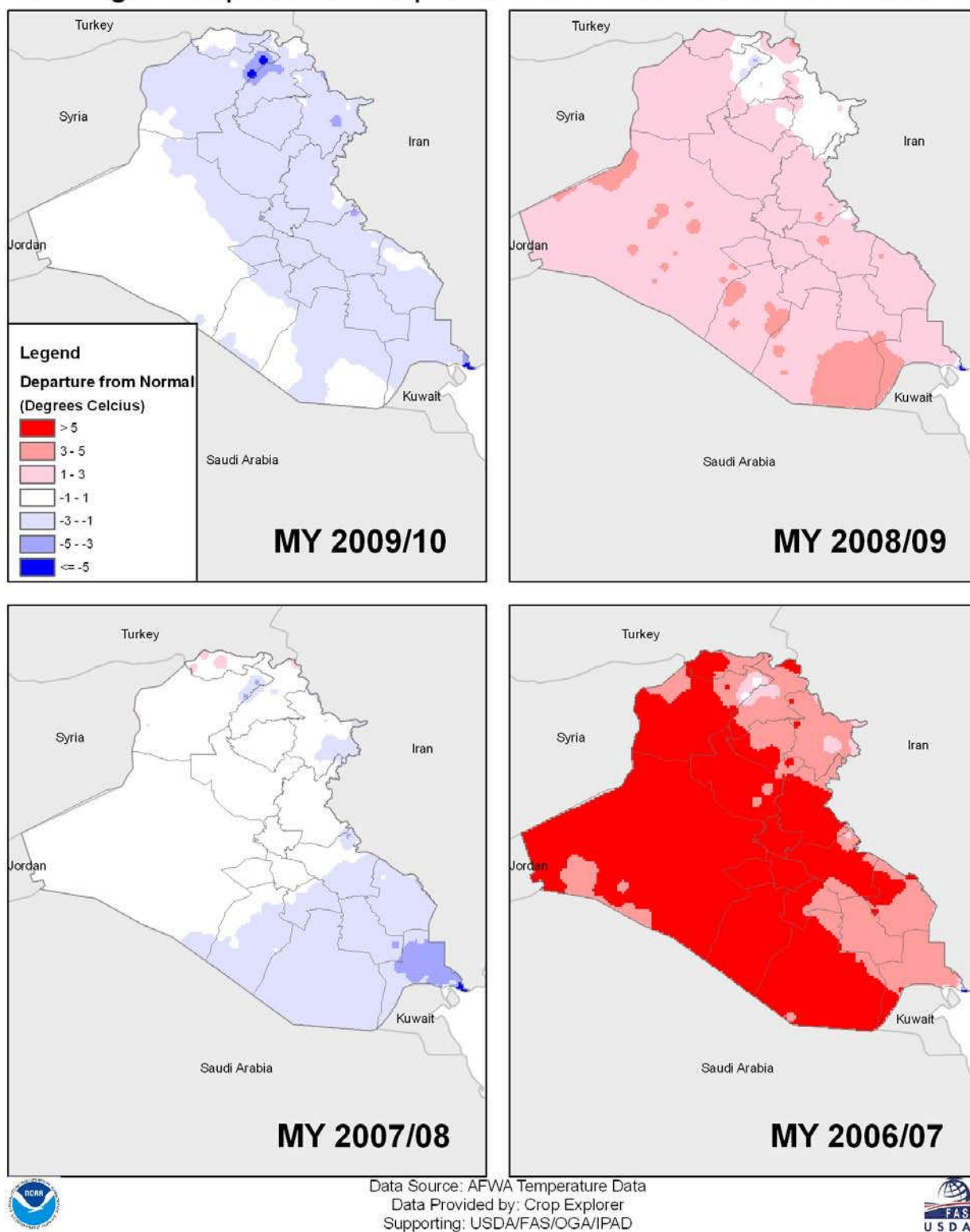


Figure 6: Average temperature departure comparison: MY 2006/07 to MY 2009/10.

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Forecasted Cumulative Precipitation as of December 31st, 2008

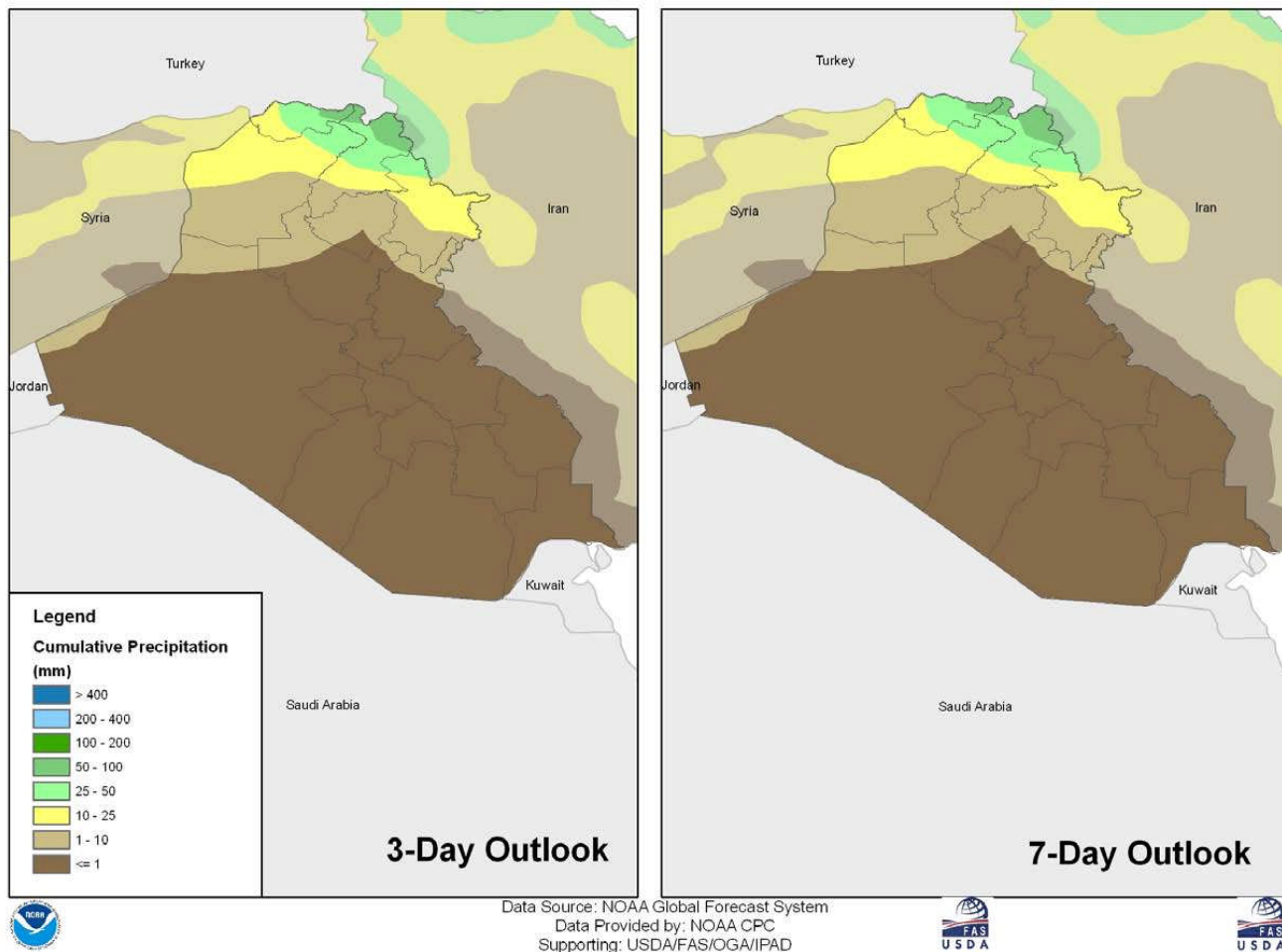


Figure 7: Forecasted rainfall accumulation for the current week.

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Vegetation Index (NDVI) for December 2008: AWiFS Imagery

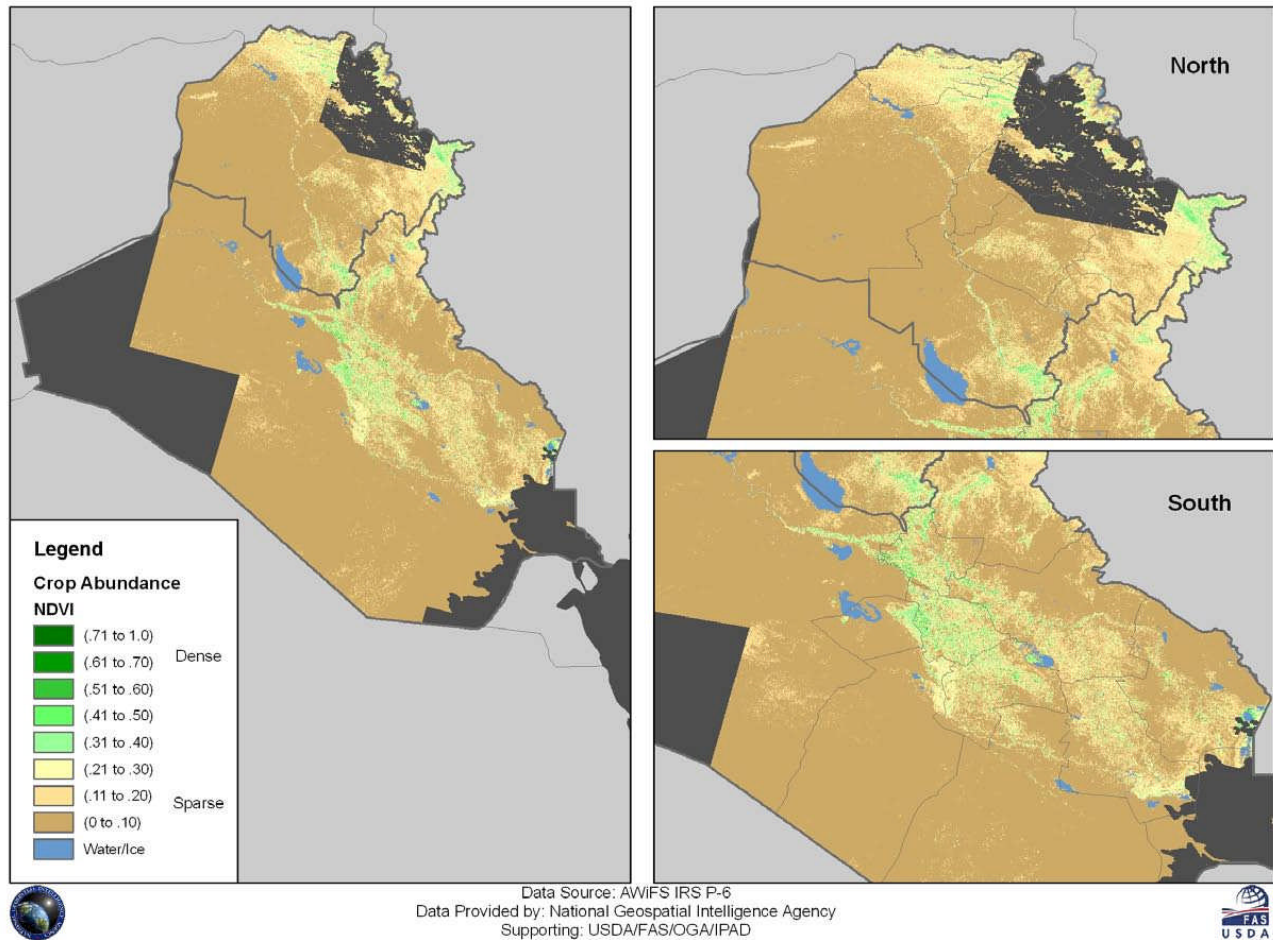


Figure 8: AWiFS Normalized Difference Vegetation Index (NDVI) for the month of December 2008.

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Vegetation Index (NDVI) for December 17th: MODIS Imagery

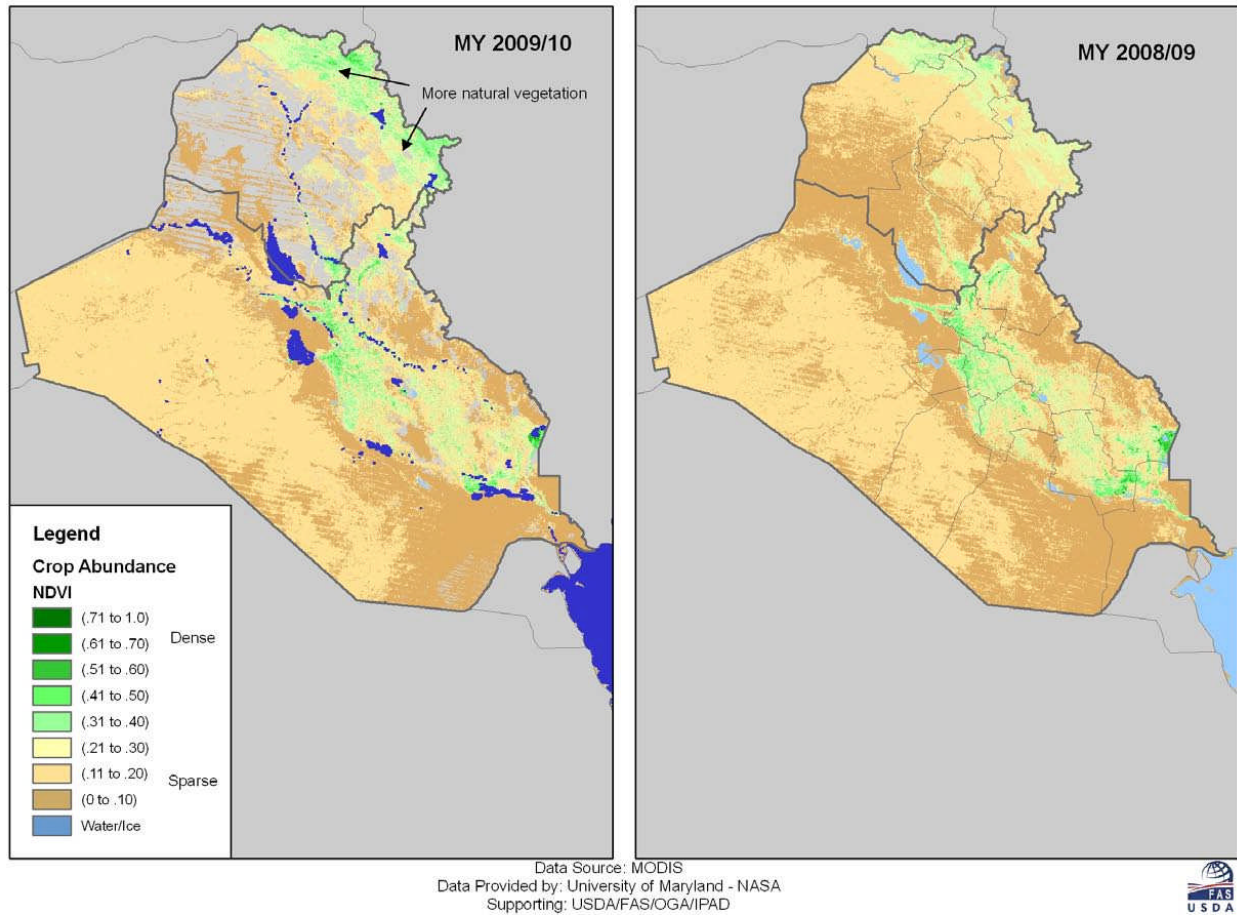


Figure 9: MODIS NDVI comparison for MY 2009/10 and MY 2008/09.

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